# **Hazard Control Plan**

Title: Field Work By ESH-3 Personnel

Identifying Number: ESH-3-HCP-01

Initial Risk Estimate: Low to Medium

Names of Individuals Performing Review: ESH Division

Work Permits: N/A

Residual Risk: Minimal

Document Developed/Updated By: Kay Karns/Lorraine Segura ESH-3 667-3363

Name(s) Phone #

**Organization:** ESH-3

Periodic Review Schedule: Triennially

Work Authorization:

Eric McNarmara, ESH-3 Acting Group Leader

Signature

 $\frac{4/102}{\text{Date}}$ 

#### I. Work Definition

A. Summary Statement of Work

Work includes field assessments to identify and evaluated ES&H hazards relating to specific projects reviewed through the Excavation Permit Review Process, SWMU Review Process, and the ESH-ID Process.

B. Equipment Used to Execute the Work

Steel-toe shoes or boots, hard hats, safety glasses, ear plugs, gloves, high-visibility construction vests, measuring tape or wheels, digital cameras, cellular phones, laptop computers, government vehicles.

C. Location of Work

All areas of the Laboratory.

D. Personnel Performing the Work

Personnel must be aware that field activities at Laboratory sites managed by other groups may be governed by specific procedures outlined by those groups. ESH-3 must follow those procedures.

- E. Worker Responsibilities
  - 1. Identifying and evaluating the hazards associated with the work, as necessary, to ensure that the controls are adequate to perform the work safety.
  - 2. Determining that the work has been authorized before proceeding.
  - 3. Acquiring the knowledge and skills needed to perform the work.
  - 4. Obtaining authorization to perform work, if needed.
  - 5. Understanding and following operational requirements and restrictions related to the work.
  - 6. Performing the work safely.
  - 7. Stopping work if it seems unsafe, following Stop Work Procedures as described in LIR 401-10-01.0.

## II. Identification of Hazards

A. Hazards Checklist

See Attachment 1.

Discussion of Initial Risk

All initial risks are equal to the "medium" category, or lower.

# III. Hazard Assessment and Control

A. Methodology

Hazards Analysis Table. See Attachment 2.

#### IV. Supporting Documentation for Performing Work

- A. Facility Documents (as they apply to the work): Facility Procedures, Conduct of Operations, site-specific training, site-specific emergency instructions.
- B. Applicable Laboratory Policy (i.e., LIRs, DPs, ARs, etc.): See Attachment 1
- C. Applicable Special Work and Radiation Work Permits: None

D. Applicable Standard Operating Procedures: None

E. Waste Profiles and Certifications: None

F. Chemical Inventories: None

G. Chemical Hygiene Requirements: N/A

#### V. Change Control

- A. Change Triggers are changes that warrant review of the Hazard Control Plan. If significant changes, as determined by the ESH-3 Group Leader with input from the ESH-3 Safety Committee and workers assigned to this HCP, are made in any of the following, then reevaluation and appropriate modification of the Hazard Control Plan must be performed before work can continue.
  - 1. Introduction of new hazards
  - 2. Changes to engineering controls
  - 3. Changes to administrative controls
- B. Scope Modification
  - 1. Discussion of change
  - 2. Date of change
- C. Effects of change
  - 1. Hazards
  - 2. Facilities
  - Workers

#### V. Supporting Documentation for Workers

- A. Formal Training Requirements
  - 1. List of training required to enable worker authorization : see Attachment 4
  - 2. Training matrix see Attachment 4
- B. Training Documents and Records

Training records will be maintained in the Lab's EDS database.

#### VI. Worker Authorization

A. Signature List:

See signed ESH-3 Worker Authorization forms on file with ESH-3 HCPs.

B. Signature Authority from Manager:

See signed ESH-3 Worker Authorization forms on file with ESH-3 HCPs.

C. Reauthorization: will be done annually

## **Attachment 1 Hazard Identification Checklist**

Physical Hazards	(also reference	29 CFR	1910
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- ⊠ Confined space (AR 8-1)
- Eye or vision (TB 1201)
- ☑ Lifting or carrying heavy objects (LIR 402-870-01)
- Hot surfaces
- $\square$  Loud noise (AR-8-2)
- Missiles, projectiles, falling objects
- Sharp edges or points
- Temperature extremes (hot/cold work environment)
- ☐ Construction site hazards, e.g., walking/working surfaces (29 CFR 1926)
- $\square$  Working at heights > 4 feet

#### **Radiation Hazards**

☑ Ionizing radiation (LIR 402-7xx, LS 107-03, & LM 107-01)

#### **Electrical Hazards**

- Shock hazard (LIR 402-600-01, LIG 402-600-01)
- $\overline{\boxtimes}$  Shock hazard (other, e.g., from standing water)

#### **Environmental Hazards**

- Asbestos (AR 6-10)
- ☐ Hazardous waste (LIR 404-00-03, LS 105-05)
- Industrial or toxic wastewater (LIR 404-00-01)
- ☑ Low-level radioactive waste (LIR 404-00-01, LS 105-05)
- Mixed low-level waste (LIR 404-00-03, LS 105-05)
- Polychlorinated biphenyls (AR 10-4)
- Radioactive wastewater (LÎR 404-00-01)
- Radiological air emission (LIR 404-10-01, LS 104-01)
- ☐ Transuranic waste (LIR 404-00-01, LIG 404-00-01)

# **Attachment 2**

# **HAZARD ANALYSIS**

Field Work by ESH-3 Personnel.

Task	Hazards *	Consequences	Initial Risk	Controls	Residual Risk
	(potential)	(potential)			
Entering a     Technical     Area to     conduct site     visit related to     specific     project.	<ul> <li>Construction site physical hazards (tripping or falling, trenches/holes, sharp tools, falling debris),</li> <li>Biohazards (poisonous snakes, animals, plants).</li> <li>Weather Conditions (lightning, flooding, temp extremes)</li> <li>Radiological hazards</li> <li>Off-road driving hazards (dangerous road conditions, high speeds)</li> </ul>	Major Injury or Illness	Improbable/Catastrophic or Occasional/Critical or Probable/Moderate MEDIUM	<ul> <li>Training (see Attachment 4)</li> <li>Follow LANL and Facility procedures (e.g. HazCom when appropriate)</li> <li>Procedure:</li> <li>Use your senses (smell &amp; listen);</li> <li>Follow postings, especially any entry requirements (PPE may be required);</li> <li>Wear appropriate shoes, safety glasses, hard hats</li> <li>Keep first aid kit in government vehicle</li> <li>Wear seat belts</li> <li>No outside site visits during thunderstorms – follow lightning rules.</li> <li>Must carry cell phone and pager. If conducting site visit alone, must also check in and out with ESH-3 Group Office.</li> <li>Use of 4 wheel drive vehicles.</li> </ul>	Remote/Catastrophic or Improbable/Critical or Occasional /Moderate  LOW

<sup>\*</sup>These hazards are those special hazards associated with field work. They do not include standard hazards (e.g. slips, trips, falls) or hazards related to driving on roadways, etc.

# **Attachment 3**

The following persons will be authorized to perform the work contained in this HCP once the worker and his/her manager have signed the **ESH-3 Worker Authorization** form for this HCP.

Name	Z Number

Name	Z Number

# Attachment 4 TRAINING MATRIX

TASK	Training Required
<ul><li>1. Entering a laboratory or other hazardous area</li><li>• Field assessments</li></ul>	<ul> <li>CPR/First Aid - annually</li> <li>Back/Wise Ergonomic Connections – 1 time</li> <li>Site-specific, including Emergency Response Plans, and documents pertaining to nuclear facilities – as needed</li> <li>Radiological Worker II – every 2 years</li> <li>Snake/Insect Awareness – 1 time</li> <li>Wildlife Encounter Training – 1 time</li> <li>Construction Site Hazards Video – 1 time</li> <li>Hazwoper – 40 hour with 8 hour refresher every year after</li> </ul>